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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/401,632	09/22/99	SCHLESINGER	R 5050/582

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QM12/0426

EXAMINER

KLINE, E

ART UNIT

PAPER NUMBER

3763

DATE MAILED:

04/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/401,632

Applicant(s)

Schl sing r et al.

Examiner

Eric Klin

Group Art Unit

3763



☒ Responsive to communication(s) filed on Sep 22, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-37 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-37 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-30, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarangapani, US Patent 5,328,954.

The '954 patent discloses a medical catheter comprising a shaft (12), a non-conductive braid (15) being nylon (column 7, line 10).]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-13, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley et al., US Patent 4,951,677 in view of Sarangapani, US Patent 5,328,954.

The '677 patent discloses a medical diagnostic ultrasound catheter comprising a conductor (40), a shaft surrounding the conductor (38, 36, 34), a braid (36) embedded in the shaft; a tip

portion (24). '677 does not teach a non-conductive braid made of nylon.

The '954 patent does disclose a braid of a catheter being non-conductive and made of nylon (15). It would have been obvious to one of ordinary skill in the art to use the braid of '954 on the ultrasound catheter of '677 as it is well known for any type of catheter to have a braid to help navigate the catheter, therefore replacing the braid of '677 would help to navigate while not permitting conduction of electricity through the braid.

Claims 15-22, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over '677 in view of Eberle et al., US Patent 5,857,974.

The '677 patent discloses applicant's inventions substantially as claimed, including a lens (52) adjacent the ultrasound transducer. '677 does not teach a dielectric film adjacent the ultrasound transducer.

The '974 patent does teach an ultrasound catheter with a dielectric film (column 4,5; lines 65-66; 1-3) comprising Mylar adjacent the ultrasound transducer.

It would have been obvious to one of ordinary skill in the art to modify the invention of '677 to include dielectric film as taught by '974 to lower the impedance of ultrasound waves.

Claims 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over '954 in view of Mortier et al., US Patent 5,899,892.

'954 discloses applicant's invention substantially as claimed. '954 does not teach a braid made of liquid crystal polymer. '892 does teach a braid made of liquid crystal polymer (claim 1). It would have been obvious to one of ordinary skill in the art to exchange the braid of '954 for that of '892 because they both perform the same function of providing stiffness and are art recognized equivalents.

Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over '677 in

view of '892.

'677 discloses applicant's invention substantially as claimed. '677 does not teach a braid made of liquid crystal polymer. '892 does teach a braid of liquid crystal polymer. It would have been obvious to substitute the braid of '677 with the liquid crystal polymer braid of '892 so that there was no conduction of electricity.

Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over '677 in view of '954 as applied to claims 1 and 10 above, and further in view of '974.

'677 and '954 disclose applicant's invention substantially as claimed. '677 nor '954 teach the use of dielectric film adjacent the ultrasound transducer. As stated above, '974 does teach dielectric film and would have been obvious to include the film on the invention of '677 as modified by '954 to lower the impedance of ultrasound waves.

Claims 23, 28 rejected under 35 U.S.C. 103(a) as being unpatentable over '677 in view of '974 as applied to claims above, and further in view of '954.

'677 and '974 disclose applicant's invention substantially as claimed. '677 nor '974 teach a non-conductive braid. '954 does teach a nonconductive braid as stated above and would have been obvious to use the non-conductive braid of '954 on the invention of '677 as modified by '974 as they both perform the same function of providing stiffness and are art recognized equivalents..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Kline whose telephone number is (703) 305-7350. The examiner can normally be reached on Monday-Thursday from 8:00am to 5:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins, can be reached on (703) 308-1344. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4520.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


WYNN WOOD COGGINS
SUPERVISORY PATENT EXAMINER

April 21, 2000

Eric Kline



Art Unit 3763